Attachment 1: Computational Logic

1.1 Account Maintenance Fee

The Account Maintenance Fee (AMF) payments for the first three quarters of Fiscal Year 1999 were based on the original principal balance of open loans in NSLDS as of September 30, 1998. The original principal balance equals the Amount of Guarantee minus the Amount of Cancellation. The AMF quarterly payments were calculated by multiplying this original principal balance by 0.12 percent and dividing by four.

The computation logic for the first three quarters of Fiscal Year 1999 was as follows:

Value Calculated	NSLDS Source Attributes from DPI	NSLDS Computation Logic
Open Loans Guaranteed Amount	Amount of Guaranty Date of Guaranty Type of Loan Code for Guaranty Agency Code For Loan Status Date of Loan Status Date Guaranty Transferred	For each GA, for all FFEL loan types (Type of Loan) with a Code For Loan Status equal to DA, FB, ID, or RP and the Date of Loan Status is in effect as of September 30, 1998, accumulate the Amount of Guaranty when the GA has responsibility for the loan on September 30, 1998.
Open Loans Canceled Amount	Amount of Cancellation Date of Cancellation Type of Loan Code for Guaranty Agency Code For Loan Status Date of Loan Status Date Guaranty Transferred	For each GA, for all FFEL loan types (Type of Loan) with a Code For Loan Status equal to DA, FB, ID, or RP and the Date of Loan Status is in effect as of September 30, 1998, accumulate the Amount of Cancellation when the Date of Cancellation is prior or equal to September 30, 1998, and the GA has responsibility for the loan on September 30, 1998.

1.1.1 Revised AMF Logic

Beginning with the fourth quarter of Fiscal Year 1999, AMF was based on the original principal balance of open loans in NSLDS as of September 30, 1999. The revised computation logic for the fourth quarter of Fiscal Year 1999 and subsequent quarters is shown below. For a more detailed description of the selection algorithm, refer to page 8 of this attachment. The AMF fourth quarter payment for Fiscal Year 1999 was calculated by multiplying this original principal balance by 0.12 percent and subtracting the advances made in the first three quarters of the year.

Value Calculated	NSLDS Source Attributes from DPI	NSLDS Computation Logic
Open Loans Guaranteed Amount	Amount of Guaranty Date of Guaranty Type of Loan Code for Guaranty Agency Code For Loan Status Date of Loan Status Date of Outstanding Principal Balance Date Repurchased Date Claim Paid Date Guaranty Transferred	Accumulate the Amount of Guaranty when the GA has responsibility for the loan on September 30, 1999, for each GA, for all FFEL loan types (Type of Loan) using the following logic: (1) loans successfully loaded on NSLDS for which Date of Outstanding Principal Balance has not been updated since July 1, CCYY* are excluded; (2) loans successfully loaded on NSLDS with a Code For Loan Status equal to DA, FB, ID, or RP as of September 30, 1999, are included; (3) all loans successfully loaded on NSLDS that are in a status other than DA, FB, ID, or RP as of September 30, 1999, but have a repurchase date later than the Date of Loan Status but on or before September 30, 1999, are included; (4) all loans successfully loaded on NSLDS that have no status effective on or before September 30, 1999, will be included, as long as there is no insurance claim payment on or before September 30, 1999. If there is an insurance claim payment for these loans, the loan must have a repurchase date later than the insurance claim payment date but on or before September 30, 1999, to be included.

Value Calculated	NSLDS Source Attributes from DPI	NSLDS Computation Logic
Open Loans Canceled Amount	Amount of Cancellation Date of Cancellation Type of Loan Code for Guaranty Agency Code For Loan Status Date of Loan Status Date of Outstanding Principal Balance Date Repurchased Date Claim Paid Date Guaranty Transferred	Accumulate the Amount of Cancellation when the GA has responsibility for the loan on September 30, 1999, for each GA, for all FFEL loan types (Type of Loan) using the following logic: (1) loans successfully loaded on NSLDS for which Date of Outstanding Principal balance has not been updated since July 1, CCYY* are excluded; (2) loans successfully loaded on NSLDS with a Code For Loan Status equal to DA, FB, ID, or RP as of September 30, 1999, are included; (3) all loans successfully loaded on NSLDS that are in a valid status other than DA, FB, ID, or RP as of September 30, 1999, but have a repurchase date later than the Date of Loan Status but on or before September 30, 1999, are included; (4) all loans successfully loaded on NSLDS that have no valid status reported on or before September 30, 1999, will be included, as long as there is no insurance claim payment on or before September 30, 1999. If there is an insurance claim payment for these loans, the loan must have a repurchase date later than the insurance claim payment date but on or before September 30, 1999, to be included.

* This date is adjusted based on the year calculated. For example, for the original principal balance calculated as of September 30, 1999, the date used will be July 1, 1995; for the original principal balance calculated as of September 30, 2000, the date used will be July 1, 1996; and for the original principal balance calculated as of September 30, 2001, the date used will be July 1, 1997.

Note: Because of timing differences, it is possible for NSLDS to have received updates on loans that were in a guaranty agency's portfolio as of September 30, 1999, but were transferred either to the Education Credit Management Corporation (ECMC) or Debt Collection Services (DCS) prior to the NSLDS calculation of the AMF fee. The subrogation file format does not include the Amount of Guaranty; it includes only the Amount of Disbursement. When ECMC or DCS reports the transferred loan to NSLDS, the Amount of Disbursement from the subrogation file becomes the Amount of Guaranty in NSLDS. In this situation, the cancellation amount in NSLDS will not be subtracted from the Guaranty Amount since the disbursed amount will be net of cancellations. When you compare these loans to your agency's own system of record, your Amount of Guaranty minus your Amount of Cancellation should equal the Amount of Guaranty in the NSLDS loan-level detail file. You will be able to identify these loans by looking at the Indicator for Exclusion of Cancellation Amount on the AMF back-up data file.

1.2 Loan Processing and Issuance Fee

The Loan Processing and Issuance Fee (LPIF) payments were advanced for each quarter of Fiscal Year 1999 based on the Net Guarantee Amount (Amount of Guarantee minus Amount of Cancellation) as reported to NSLDS, multiplied by 0.65 percent. Starting in the first quarter of Fiscal Year 2000, LPIF will be based on Amount of Disbursements as reported to NSLDS.

1.2.1 Transition Period

In order for agencies to prepare for the transition of fee payment based on disbursements, the fee was advanced on the amount of net guarantees reported to NSLDS. For the quarters ending December 31, 1998, March 31, 1999, June 30, 1999, and September 30, 1999, the amount of LPIF was based on the Amount of Guaranty minus Amount of Cancellations as reported to NSLDS. The following describes the method NSLDS used to aggregate this value.

Value Calculated	NSLDS Source Attributes from DPI	NSLDS Computation Logic
Loans Guaranteed Amount	Amount of Guaranty Date of Guaranty Type of Loan Code for Guaranty Agency Date Guaranty Transferred	For each GA, for loan types (Type of Loan) equal to SF, SU, and PL for all loans guaranteed on or after October 1, 1998, through the quarter end date, accumulate the Amount of Guaranty when the Date of Guaranty is on or before the quarter end date and the GA has responsibility for the loan on the Date of Guaranty. The amount of guarantee will be calculated as a year to date value. For the second quarter (March 31, 1999), third quarter (June 30, 1999), and fourth quarter (September 30, 1999), the sum of the previous quarter's total will be subtracted from the year to date value to calculate the amount of guaranty for the quarter.
Loans Canceled Amount	Amount of Cancellation Date of Cancellation Type of Loan Code for Guaranty Agency Date Guaranty Transferred	For each GA for loan types (Type of Loan) equal to SF, SU, and PL for all loans guaranteed on or after October 1, 1998, though the quarter end date, accumulate the Amount of Cancellation when the Date of Cancellation is on or before the quarter end date and the GA has responsibility for the loan on the Date of Cancellation. The amount of cancellation will be calculated as a year-to-date value. For the second quarter (March 31, 1999), third quarter (June 30, 1999), and fourth quarter (September 30, 1999), the sum of the previous quarter's total will be subtracted from the year-to-date value to calculate the amount of cancellation for the quarter.

1.2.2 Loan Processing and Issuance Fee Based on Disbursements Reported to NSLDS

Beginning the first quarter of Fiscal Year 2000 (October 1, 1999), LPIF will be based on disbursement data as reported to NSLDS. LPIF payments in Fiscal Year 2000 will be based on disbursement amounts reported to NSLDS for new loans guaranteed on or after October 1, 1998, using the logic described below, multiplied by 0.65 percent. The following describes the method used by NSLDS to aggregate the Amount of Disbursement.

Value Calculated	NSLDS Source Attributes from DPI	NSLDS Computation Logic
Amount of Disbursement	Date of Guaranty Amount of Disbursement Date of Disbursement Type of Loan Code for Guaranty Agency Date Guaranty Transferred	For each GA, for loan types (Type of Loan) equal to SF, SU, and PL, accumulate the Amount of Disbursement when the Date of Guaranty is on or after October 1, 1998, and on or before the quarter end date, and the Date of Disbursement is on or after October 1, 1998, but before the quarter end date, and the GA has responsibility for the loan on the Date of Disbursement. Calculate the difference between the current period Amount of Disbursement (Cumulative Disbursement Amount for the GA from October 1, 1998, through the end of the current quarter) and the prior period Amount of Disbursement (Cumulative Disbursement Amount for the GA from October 1, 1998, through the end of the previous quarter).

Algorithm for determination of loan extraction or bypass for AMF

Note: The algorithm will process until a loan is either extracted or bypassed. END denotes the Completion of the algorithm and the determination of either extraction or bypass.

1. Does the loan have an outstanding principal balance date on/after 7/1/CCYY* OR does the loan have an outstanding principal balance date of null and a guaranty date on/after 7/1/CCYY*?
   –If yes, step 2
   –If no, bypass loan END
2. Is the current loan status date on/before 9/30/CCYY**?
   –If yes, step 3
   –If no, step 4
3. Is the current loan status ID, DA, FB, or RP?
   –If yes, extract loan END
   –If no, step 8
4. *Sort loan status records associated with current loan by descending loan status date where the loan status date is on/before 9/30/CCYY** and the valid indicator is spaces (not a corrected record).*
5. Were any records returned (is there at least one valid loan status record)?
   –If yes, step 6
   –If no, step 10
6. *Look at most recent loan status record (using loan status date to determine "most recent") from results of step 4.*
   Note: This would be the current record for the current loan since the records have already been sorted by descending loan status date.
7. Is the loan status ID, DA, FB, or RP?
   –If yes, extract loan END
   –If no, step 8
8. *Read repurchase loan records associated with current loan where the repurchase date is on/after the loan status date of the current loan status record AND the repurchase date is on/before 9/30/CCYY**.*
9. Were any records returned (at least one repurchase loan record)?
   –If yes, extract loan END
   –If no, bypass loan END
10. *Sort insurance claim payment records associated with current loan by descending insurance claim payment date where the insurance claim payment date is on/before 9/30/CCYY** and the valid indicator is spaces (not a corrected record).*
11. Were any records returned (at least one valid insurance claim payment record)?
    –If yes, step 12
    –If no, extract loan END
12. *Sort repurchase loan records associated with current loan by descending repurchase loan date.*
13. Were any records returned (at least one repurchase loan record)?
    –If yes, step 14
    –If no, bypass loan END
14. Is the repurchase date of the current repurchase loan record on/after the insurance claim payment date of the current (most recent) insurance claim payment record AND is the repurchase date of the current repurchase loan record on/before 9/30/CCYY**?
    –If yes, extract loan END
    –If no, proceed to next repurchase loan record
15. Is there a current repurchase loan record?
    –If yes, step 14
    –If no, bypass loan END

* This date is adjusted based on the year calculated. For example, for the original principal balance calculated as of September 30, 1999, the date used will be July 1, 1995; for the original principal balance calculated as of September 30, 2000, the date used will be July 1, 1996.

** This date is adjusted based on the year calculated. For example, for the original principal balance calculated as of September 30, 1999, the date used will be September 30, 1999; for the original principal balance calculated as of September 30, 2000, the date used will be September 30, 2000.